

Jeopardy Assessment
For the Proposed Incidental Taking Authorization of the
Butler's Garter Snake

Moss-American Superfund Project- Reach 4
Milwaukee County, Wisconsin

Background

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frost line and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a Brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

Jeopardy Assessment

The proposed Kerr-McGee Moss-American Superfund Project- Reach 4 along the Little Menomonee River will result in temporary loss of Butler's gartersnake habitat and minimal taking of the snake. To minimize take, snake removals are underway and will be completed prior to construction activity initiation. Habitat restoration following the clean-up activities is required and is expected to improve overall site conditions for the snake. The conditions that Kerr-McGee is required to follow are detailed below. The Department hereby determines that the activities resulting from the clean-up activities is unlikely to jeopardize the Butler's gartersnake population at this location nor will it jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part.

Required Conservation Measures

1. Complete snake removals prior to the initiation of construction activities. All snakes removed from the site will be relocated immediately upstream of the site in suitable snake habitat in Reach 3 of this project.
2. Finalize and implement a Conservation Plan for this site that addresses site restoration, follow-up habitat monitoring and management, and snake and worm monitoring and re-establishment as needed based on monitoring results.